

SONY®

FM/AM Compact Disc Player

Operating Instructions _____

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Owner's Record

The model and serial numbers are located on the bottom of the unit.

Record the serial number in the space provided below.

Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. CDX-C680 Serial No. _____

For installation and connections, see the supplied installation/connections manual.



CDX-C680

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Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

CAUTION

The use of optical instruments with this product will increase eye hazard.

Welcome !

Thank you for purchasing the Sony Compact Disc Player. This unit lets you enjoy a variety of features by using either an optional rotary commander or an optional wireless remote.

In addition to the CD playback and radio operations, you can expand your system by connecting an optional CD/MD unit*¹. If you operate this unit or connect an optional CD unit with the CD TEXT function, the CD TEXT information will appear in the display when you play back a CD TEXT disc*².

*¹ You can connect to a CD changer or an MD changer.

*² A CD TEXT disc is an audio CD that includes information such as the disc name, artist name and track names.
This information is recorded on the disc.

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With Optional Equipment

CD/MD Unit

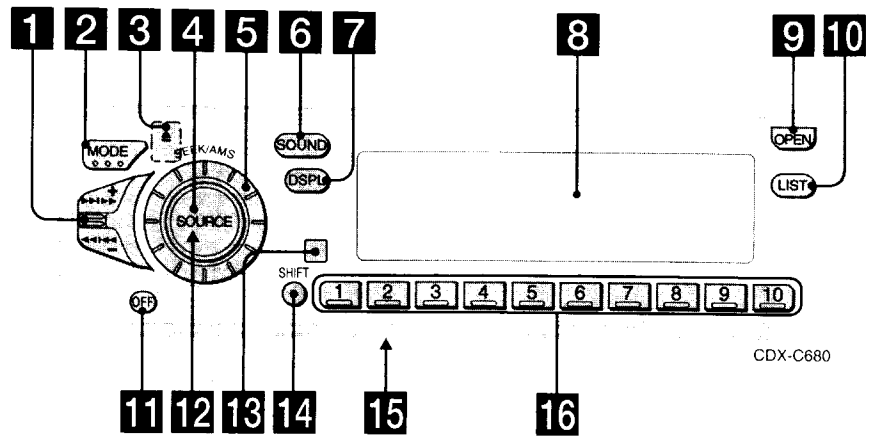
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Location of controls



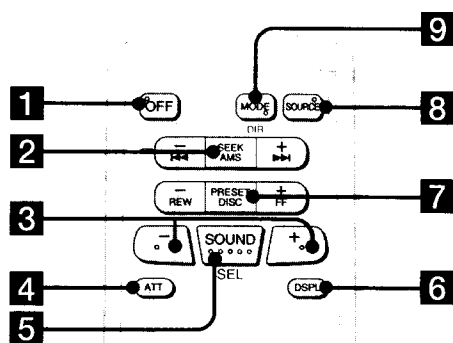
CDX-C680

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Refer to the pages for details:

- 1** SEEK/AMS (seek/Automatic Music Sensor/manual search) control
9, 10, 12, 13, 14, 20, 21, 22, 25
- 2** MODE (band/unit select) button
13, 19, 21, 24
- 3** ▲ (eject) button (located on the front of the unit hidden by the front panel) 8
- 4** SOURCE (source select) button
8, 13, 18, 19, 21, 24
- 5** Dial (volume/subwoofer volume/bass/treble/left-right/rear-front control)
7, 15, 17, 23, 24
- 6** SOUND button 17
- 7** DSPL (display mode change) button
8, 14, 15, 19, 24, 25
- 8** Display window
- 9** OPEN button 6, 8, 27
- 10** LIST button
Station Memo 14, 15
Disc Memo 23, 24
List-up 15, 25
- 11** OFF button 6, 8
- 12** Reset button (located on the front side of the unit behind by the front panel) 6
- 13** Receptor for the optional wireless remote
- 14** SHIFT button
PLAY MODE 9, 10, 11, 12, 13, 14, 20, 21, 22, 23, 25, 26
REP 10, 20
SET UP 7, 8, 18, 19
SHUF 10, 20
- 15** POWER SELECT switch (located on the bottom of the unit)
See "POWER SELECT Switch" in the Installation/Connections manual.
- 16** During radio reception:
Number buttons 13
During CD/MD playback:
Direct disc selection buttons 20, 21

Optional wireless remote (RM-X47)



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The buttons of the wireless remote work the same functions as those on this unit.

- | | |
|--|--|
| <p>1 OFF button</p> <p>2 SEEK/AMS button</p> <p>3 buttons</p> <p>4 ATT button</p> <p>5 SOUND/SEL button</p> <p>6 DSPL button</p> | <p>7 PRESET/DISC button
<i>You cannot do manual search and manual tuning with the remote.</i></p> <p>8 SOURCE button</p> <p>9 MODE/DIR button
 controls the same function on this unit.</p> |
|--|--|

When the POWER SELECT switch is set to the **B** position, the unit cannot be operated with the wireless remote unless on the unit is pressed or a CD is inserted to activate the unit first.

Getting Started

Resetting the unit

Before operating the unit for the first time or after replacing the car battery, you must reset the unit.

Press the reset button with a pointed object, such as a ballpoint pen.



Reset button

Notes

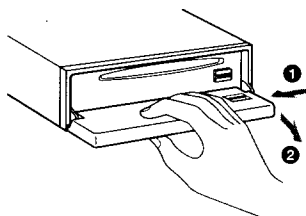
- Pressing the reset button will erase the clock and some memorized functions.
- When you connect the power supply cord to the unit or reset the unit, wait for about 10 seconds before you insert a disc. If you insert a disc within these 10 seconds, the unit will not be reset, and you will have to press the reset button again.

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Detaching the front panel

You can detach the front panel of this unit to prevent the unit from being stolen.

- 1 Press **OFF**.
- 2 Press **OPEN** to open the front panel, then slide the front panel to the left side, and pull out the right side of the front panel.



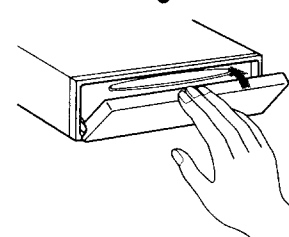
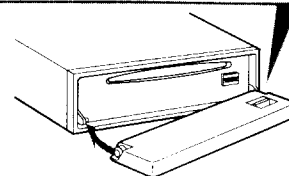
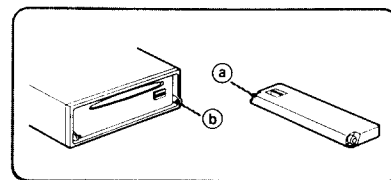
Notes

- Do not put anything on the inner surface of the front panel.
- Be sure not to drop the panel when detaching it from the unit.
- If you detach the panel while the unit is still on, the power will turn off automatically to prevent the speakers from being damaged.
- When you carry the front panel with you, put it in the supplied front panel case.

6

Attaching the front panel

Place the hole (a) in the front panel onto the spindle (b) on the unit as illustrated, then push the left side in.



Notes

- Be sure not to attach the front panel upside down.
- Do not press the front panel hard against the unit when attaching it. Press it lightly against the unit.
- Do not press hard or put excessive pressure on the display windows of the front panel.
- Do not expose the front panel to direct sunlight, heat sources such as hot air ducts, and do not leave it in a humid place. Never leave it on the dashboard of a car parked in direct sunlight where there may be a considerable rise in temperature.

Caution alarm

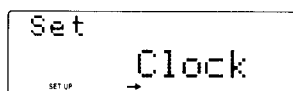
If you turn the ignition key switch to the OFF position without removing the front panel, the caution alarm will beep for a few seconds (only when the POWER SELECT switch is set to the (A) position).

Setting the clock

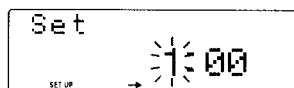
The clock uses a 12-hour digital indication.

Example: Set the clock to 10:08

- 1** Press **(SHIFT)**, then press **(3)** (SET UP).

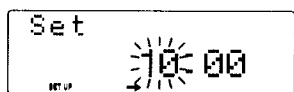
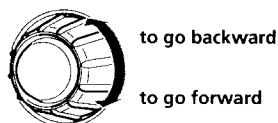


- 1** Press **(5)** (→).

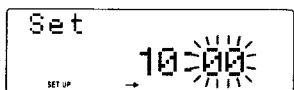


The hour digit flashes.

- 2** Set the hour.

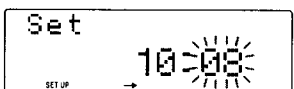
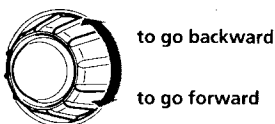


- 3** Press **(5)** (→).

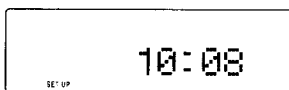


The minute digits flash.

- 4** Set the minute.



- 2** Press **(SHIFT)**.



The clock starts.

- 3** Press **(SHIFT)**.

After the mode setting is complete, the display goes back to normal playback mode.

Note

If the **POWER SELECT** switch on the bottom of the unit is set to the **ⓐ** position, turn the power on first, then set the clock.

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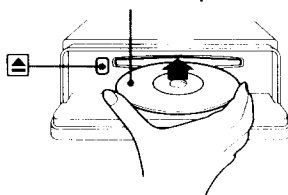
Getting Started

CD Player

Listening to a CD

- 1 Press **OPEN** and insert the CD.

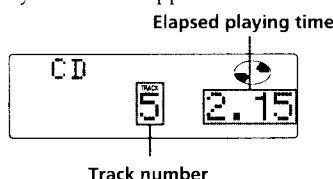
Labelled side up



- 2 Close the front panel.
Playback starts automatically.

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If a CD is already inserted, press **SOURCE** repeatedly until "CD" appears.

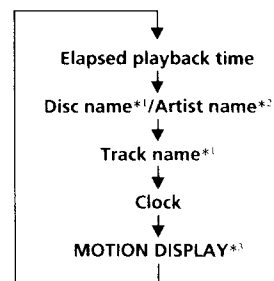


Note
To play back an 8 cm (3 in.) CD, use the optional Sony compact disc single adapter (CSA-8).

To	Press
Stop playback	OFF
Eject the CD	OPEN then ▲

Changing the displayed item

Each time you press **DSPL**, the item changes as follows:



*1 If you inserted a non-CD TEXT disc, "NO D.Name" or "NO T.Name" appears in the display.

*2 If you play a CD TEXT disc, the artist name appears in the display after the disc name. (Only for CD TEXT discs with the artist name.)

*3 All the items above are scrolled in the display one by one in order.

You can label CD and CD TEXT discs with a personalized name using the disc memo function, refer to "Labeling a CD" (page 23). However, if you use personalized labels, they will always take priority over the original CD TEXT information when such information is displayed.

Tip

If the name of the CD TEXT disc is too long, you can scroll it across the display by pressing **SHIFT**, then **2** (←).

Automatically scrolling a disc name — Auto Scroll

If the disc name/artist name or track name on a CD TEXT disc exceeds 10 characters and the Auto Scroll function is on, automatically scrolls on the display as follows:

- The disc name appears when the disc has changed (if the disc name is selected).
- The track name appears when the track has changed (if the track name is selected).

If you press **DSPL** to change the display item, the disc or track name of the CD TEXT disc is scrolled automatically whether you set the function on or off.

- 1 During playback, press **SHIFT**.

- 2 Press **3** (SET UP) repeatedly until "A.Scr1" appears.

- 3 Press **5** (→) to select "A.Scr1 on."

- 4 Press **SHIFT**

To cancel Auto Scroll, select "A.Scr1 off" in step 2 above.

Note

For some CD TEXT discs with extremely many characters, the following cases may happen:
— Some of the characters are not displayed.
— Auto Scroll does not work.

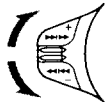
Locating a specific track

— Automatic Music Sensor (AMS)

During playback, push the SEEK/AMS control up or down momentarily.

To locate succeeding tracks

To locate preceding tracks



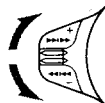
Locating a specific point in a track

— Manual Search

During playback, push the SEEK/AMS control up or down and hold. Release when you have found the desired point.

To search forward

To search backward



Note

If "LLLL" or "RRRR" appears in the display, that means you have reached the beginning or the end of the disc and you cannot go any further.

Playing a CD in various modes

You can play CDs in various modes:

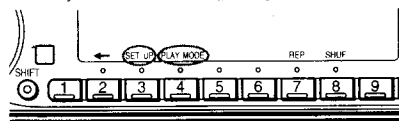
- Intro (Intro Scan) lets you play the first 10 seconds of all the tracks.
- Repeat (Repeat Play) repeats the current track.
- Shuf (Shuffle Play) plays all the tracks in random order.

Searching for the desired track

— Intro scan

1 Press (SHIFT).

Every time you press (SHIFT), only the items you can select light up.



2 Press (4) (PLAY MODE) repeatedly until "Intro" appears.

Each time you press (4) (PLAY MODE), the item changes as follows:

Intro ↔ PGM



3 Press (5) (→) to select "Intro on."



Intro Scan starts.

4 Press (SHIFT).

To go back to normal playback mode, select "Intro off" in step 3 above.

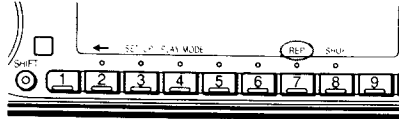
EN

CD Player

Playing tracks repeatedly

— Repeat Play

- 1 During playback, press **(SHIFT)**.
- 2 Press **(7)** (REP) repeatedly until "Repeat 1" appears.



Repeat Play starts.

- 3 Press **(SHIFT)**.

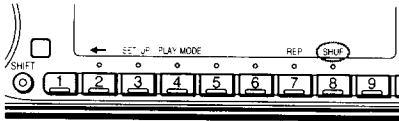
To go back to normal playback mode, select "Repeat off" in step 2 above.

Playing tracks in random order

— Shuffle Play

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- 1 During playback, press **(SHIFT)**.
- 2 Press **(8)** (SHUF) repeatedly until "Shuf 1" appears.



Shuffle Play starts.

- 3 Press **(SHIFT)**.

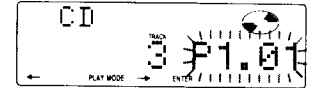
To go back to normal playback mode, select "Shuf off" in step 2 above.

Creating a programme

— CD Programme Memory

You can play the tracks in the order you want by making your own programme. You can make two programmes: Programme 1 and Programme 2. You can select up to 12 tracks for each programme. You can store the programmes in memory.

- 1 Press **(SHIFT)**, then press **(4)** (PLAY MODE) for two seconds.

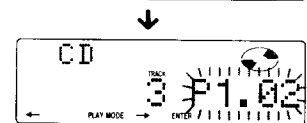
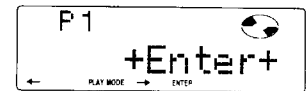


"P 1" shows Programme 1 is selected.

To select Programme 2, press **(5)** (→) repeatedly until "P 2" appears.

- 2 Push the SEEK/AMS control up or down to select the track you want.

- 3 Press **(6)** (ENTER) momentarily.



- 4 To continue entering tracks, repeat steps 2 and 3.

- 5 When you finish selecting tracks, press **(4)** (PLAY MODE) for two seconds.

- 6 Press **(SHIFT)**.

Notes

- "Wait" appears in the display while the unit is reading the data.
- "Mem Full" appears in the display when you try to enter more than 12 tracks into a programme.

Playing the stored programme

You can select:

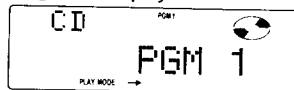
- PGM 1 to play Programme 1.
- PGM 2 to play Programme 2.
- PGM 1+2 to play Programmes 1 and 2.

1 Press **(SHIFT)**.

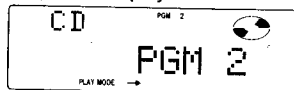
2 Press **(4)** (PLAY MODE) repeatedly until "PGM" appears.

3 Press **(5)** (→) repeatedly until the desired programme appears.

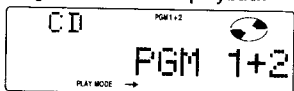
Programme 1 playback



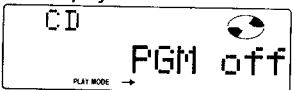
Programme 2 playback



Programmes 1 and 2 playback



Normal playback



Programme Play starts.

4 Press **(SHIFT)**.

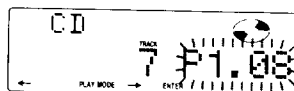
To go back to normal playback mode, select "PGM off" in step 3 above.

Note

"Not ready" appears in the display if no track is stored in the programme.

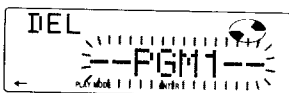
Erasing an entire programme

1 Press **(SHIFT)**, then press **(4)** (PLAY MODE) for two seconds.



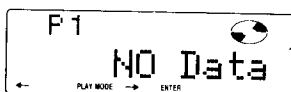
"P 1" shows Programme 1 is selected.

2 Press **(2)** (←) repeatedly until "DEL" appears.



To delete Programme 2, press **(5)** (→) repeatedly until "PGM 2" appears.

3 Press **(6)** (ENTER) for two seconds.



The entire programme is erased.

4 When you finish erasing programmes, press **(4)** (PLAY MODE) for two seconds.

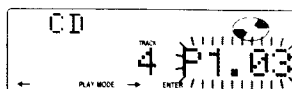
5 Press **(SHIFT)**.

EN

CD Player

Adding tracks to a programme

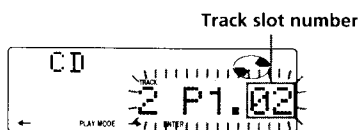
- 1 Press **(SHIFT)**, then press **(4)** (PLAY MODE) for two seconds.



"P 1" shows Programme 1 is selected.

To select Programme 2, press **(5)** ($\rightarrow$) repeatedly until "P 2" appears.

- 2 Press **(2)** ($\leftarrow$) or **(5)** ($\rightarrow$) to select the track slot number where you want to insert a track.



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- 3 Push the SEEK/AMS control up or down to select the track you want to insert.

- 4 Press **(6)** (ENTER) momentarily to enter the track.

The current track in that slot number and the succeeding tracks shift down.

- 5 To continue inserting tracks, repeat steps 2 through 4.

Note

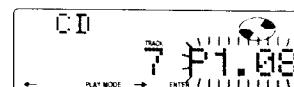
Once all 12 slots have been filled, "**Mem Full*" appears in the display, and you cannot insert tracks.

- 6 When you finish inserting tracks, press **(4)** (PLAY MODE) for two seconds.

- 7 Press **(SHIFT)**.

Erasing tracks in a programme

- 1 Press **(SHIFT)**, then press **(4)** (PLAY MODE) for two seconds.

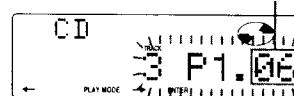


"P 1" shows Programme 1 is selected.

To select Programme 2, press **(5)** ($\rightarrow$) repeatedly until "P 2" appears.

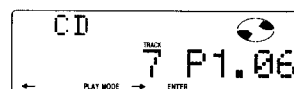
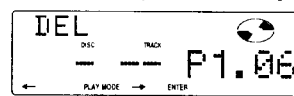
- 2 Press **(2)** ($\leftarrow$) or **(5)** ($\rightarrow$) to select the track you want to erase.

Track slot number



The track currently registered in slot 6 of Programme 1.

- 3 Press **(6)** (ENTER) for two seconds. When you erase a track from a slot number, the succeeding tracks shift up to fill the gap.



- 4 To continue erasing tracks, repeat steps 2 and 3.

- 5 When you finish erasing tracks, press **(4)** (PLAY MODE) for two seconds.

- 6 Press **(SHIFT)**.

Radio

Memorising stations automatically

— Best Tuning Memory (BTM)

The unit selects the stations with the strongest signals and memorises them in the order of their frequencies. You can store up to 10 stations on each band (FM1, FM2 and AM).

Caution

When tuning in stations while driving, use Best Tuning Memory to prevent accidents.

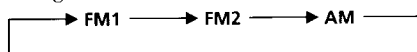
- 1 Press **(SOURCE)** repeatedly to select the tuner.

Each time you press **(SOURCE)**, the source changes as follows:

CD ↔ TUNER

- 2 Press **(MODE)** repeatedly to select the band.

Each time you press **(MODE)**, the band changes as follows:



- 3 Press **(SHIFT)**, then press **(4)** (PLAY MODE) repeatedly until "B.T.M" appears.

- 4 Press **(5)** (→).

The unit stores stations in the order of their frequencies on the number buttons. A beep sound and the setting is stored.

- 5 Press **(SHIFT)**.

Notes

- The unit does not store stations with weak signals. If only a few stations are received, some number buttons will retain their former setting.
- When a number is indicated in the display, the unit starts storing stations from the one currently displayed.

Memorising only the desired stations

You can store up to 10 stations on each band (20 for FM1 and FM2, 10 for AM) in the order of your choice.

- 1 Press **(SOURCE)** repeatedly to select the tuner.

- 2 Press **(MODE)** repeatedly to select the band (FM1, FM2 or AM).

- 3 Push the SEEK/AMS control up or down to tune in the station you want to store on the number button.

- 4 Press and hold the desired number button (**(1)** to **(10)**) until "MEM" appears.

The number button indication appears in the display.

Note

If you try to store another station on the same number button, the previously stored station will be erased.

Receiving the memorised stations

- 1 Press **(SOURCE)** repeatedly to select the tuner.

- 2 Press **(MODE)** repeatedly to select the band (FM1, FM2 or AM).

- 3 Press the number button (**(1)** to **(10)**) momentarily where the desired station is stored.

EN

CD Player/Radio

If you cannot tune in a preset station

Push the SEEK/AMS control up or down momentarily to search for the station (automatic tuning).

Scanning stops when the unit receives a station. Push the SEEK/AMS control up or down repeatedly until the desired station is received.

Note

If the automatic tuning stops too frequently, press (SHIFT), then press (4) (PLAY MODE) repeatedly until "Local" (local seek mode) is displayed. Then press (5) (→) to select "Local on." Press (SHIFT). Only the stations with relatively strong signals will be tuned in.

Tip

If you know the frequency of the station you want to listen to push the SEEK/AMS control up or down and hold until the desired frequency appears (manual tuning).

EN

If FM stereo reception is poor

— Monaural Mode

1 Press (SHIFT), then press (4) (PLAY MODE) repeatedly until "Mono" appears.

2 Press (5) (→) repeatedly until "Mono on" appears.

The sound improves, but becomes monaural ("ST" disappears).

3 Press (SHIFT).

To go back to normal mode, select "Mono off" in step 2 above.

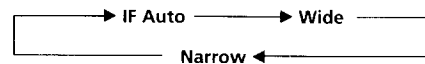
If interference occurs during FM reception

If there is interference from neighboring stations, follow the steps below and select "Narrow". If interference is not a problem, select "Wide" to maximise signal reception and improve sound quality or "IF Auto" to switch between "Narrow" and "Wide" automatically.

1 Press (SHIFT) during FM reception.

2 Press (4) (PLAY MODE) repeatedly until "IF Auto" appears.

3 Press (5) (→) repeatedly to select desired setting



4 Press (SHIFT).

Changing the displayed items

Each time you press (DSPL), the item changes as follows:



* All the items above are scrolled in the display one by one in order.

Storing the station names

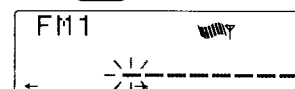
—Station Memo

You can assign a name to each radio station and store it in memory. The name of the current station appears in the display. You can store up to eight characters for each station.

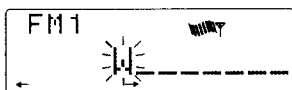
Storing the station names

1 Tune in a station whose name you want to store.

2 Press (LIST) for two seconds.



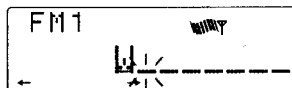
- 3 Enter the characters.**
- ① Rotate the dial clockwise to select the desired characters.**
 (A → B → C → ... Z → 0 → 1 → 2 → ... 9 → + → - → * → / → \ → > → < → . → _)



If you rotate the dial counterclockwise, the characters appear in the reverse order.

If you want to put a blank space between characters, select “_” (under-bar).

- ② Press (→) after locating the desired character.**
 The flashing cursor moves to the next space.



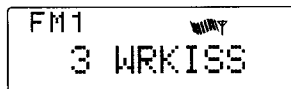
If you press (←), the flashing cursor moves to the left.

- ③ Repeat steps ① and ② to enter the entire name.**
- 4 To return to normal radio reception, press (LIST) for two seconds.**

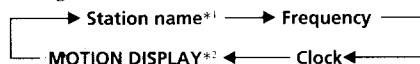
Tip
 To erase/correct a name, enter “_” (under-bar) for each character.

Displaying the station name

Press (DSPL) during radio reception.



Each time you press (DSPL), the item changes as follows:



*1 If the station name is not stored, “NO Name” appears in the display for one second.

*2 All the items above are scrolled in the display one by one in order.

Erasing the station name

- 1 Tune in any station and press (LIST) for two seconds.**
- 2 Press (DSPL) for two seconds.**
 The station name appears in the display.
- 3 Rotate the dial to select the name you want to erase.**
- 4 Press (6) (ENTER) for two seconds.**
 The name is erased.
 Repeat steps 3 and 4 if you want to erase other names.
- 5 Press (LIST) for two seconds.**
 The unit returns to normal radio reception mode.

Locating a station by name — List-up

- 1 Press (LIST) momentarily.**
 The name assigned to the current station appears in the display.



- 2 Press (LIST) repeatedly until you find the desired station.**

- 3 Press (6) (ENTER) to tune in the desired station.**

Note

After the station name or frequency has been displayed for five seconds, the display goes back to normal mode. To turn off the display, press (DSPL).

EN
Radio

Other Functions

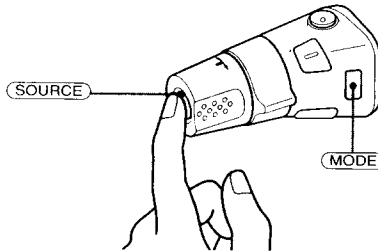
You can connect an optional rotary commander (RM-X4S) with this unit.

Using the rotary commander

The rotary commander works by pressing buttons and/or rotating controls. You can control an optional CD or MD unit with the rotary commander.

By pressing buttons (the SOURCE and MODE buttons)

EN



Each time you press **(SOURCE)**, the source changes as follows:

TUNER → CD → MD

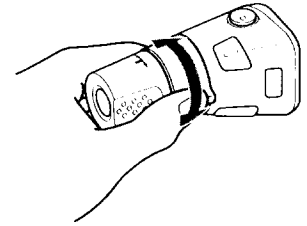
Pressing **(MODE)** changes the operation in the following ways;

- Tuner : FM1 → FM2 → AM
- CD unit : CD1 → CD2 → ...
- MD unit : MD1 → MD2 → ...

Tip

When the POWER SELECT switch is set to position **B**, you can turn on this unit by pressing **(SOURCE)** on the rotary commander.

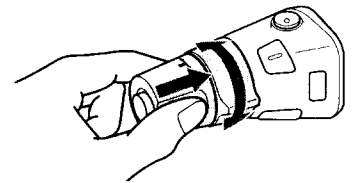
By rotating the control (the SEEK/AMS control)



Rotate the control momentarily and release it to:

- Locate a specific track on a disc. Rotate and hold the control until you locate the specific point in a track, then release it to start playback.
- Tune in stations automatically. Rotate and hold the control to tune in a specific station.

By pushing in and rotating the control (the PRESET/DISC control)

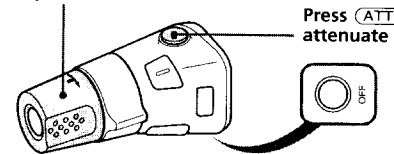


Push in and rotate the control to:

- Receive the stations memorised on the number buttons.
- Change the disc.

Other operations

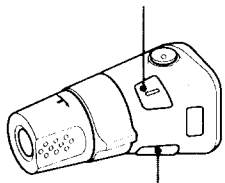
Rotate the VOL control to adjust the volume.



Press **(ATT)** to attenuate the sound.

Press **(OFF)** to turn off the unit.

Press **(SOUND)** to adjust the volume and sound menu.

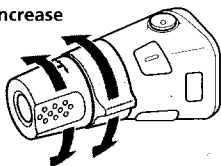


Press **(LIST)** to display the memorised names.

Changing the operative direction

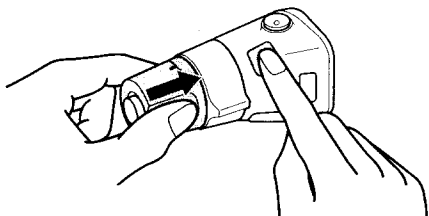
The operative direction of controls is factory-set as in the illustration below.

To increase



To decrease

If you need to mount the rotary commander on the right side of the steering column, you can reverse the operative direction.



Press **(SOUND)** for two seconds while pushing the VOL control.

Tip

You can control the operative direction of controls with the unit (page 18).

Adjusting the sound characteristics

You can adjust the bass, treble, balance and fader.

Each source can store the bass and treble levels respectively.

1 Select the item you want to adjust by pressing **(SOUND)** repeatedly.

VOL (volume) → SUB (subwoofer volume)

→ BAS (bass) → TRE (treble)

→ BAL (left-right) → FAD (rear-front)

2 Adjust the selected item by rotating the dial.

Adjust within three seconds after selecting the item. (After three seconds, the dial functions as the volume control.)

Attenuating the sound

Press **(ATT)** on the rotary commander or wireless remote.

"ATT on" flashes momentarily.

To restore the previous volume level, press

(ATT) again.

Tip

The unit decreases the volume automatically when a telephone call comes in (Telephone ATT function).

EN

Other Functions

Changing the sound and display settings

You can set:

- Clock (page 7).
- D.Info (Dual Information) to display the clock and the play mode at the same time (ON) or to display the information alternately (OFF).
- Amber/Green to change the illumination colour to amber or green.
- Dimmer to change the brightness of the display.
 - Select "Auto" to dim the display only when you turn the lights on.
 - Select "on" to dim the display.
- Contrast to adjust the contrast if the indications in the display are not recognizable because of the unit's installed position.
- Beep to turn on or off the beeps.
- RM (Rotary Commander) to change the operative direction of the controls of the rotary commander.
 - Select "norm" to use the rotary commander as the factory-set position.
 - Select "rev" when you mount the rotary commander on the right side of the steering column.
- Loud (Loudness) to enjoy bass and treble even at low volume. The bass and treble will be reinforced.
- LPF (Low Pass Filter)
- A.Scrl (Auto Scroll) (page 8, 19).

EN

1 Press **(SHIFT)**.

2 Press **(3) (SET UP)** repeatedly until the desired item appears.

Each time you press **(3) (SET UP)**, the item changes as follows:

Clock → D.Info* → Amber/Green → Dimmer
→ Contrast → Beep → RM → Loud* → LPF*
→ A.Scrl*

* When you have not tune the station or there is no CD/MD being played, these items will not appear.

Note

The displayed item will differ depending on the source.

3 Press **(5) (→)** to select the desired setting (for example: on or off).
For the "Contrast" setting, pressing **(5) (→)** makes the contrast higher, and pressing **(2) (←)** makes the contrast lower.

4 Press **(SHIFT)**.
After the mode setting is complete, the display goes back to normal playback mode.

Adjusting the frequency of the subwoofer(s)

To match the characteristics of the connected subwoofer(s), you can cut out the unwanted high and middle frequency signals entering the subwoofer(s). By setting the cut-off frequency, the subwoofer(s) will output only low frequency signals so you can get a clearer sound image.

1 Press **(SOURCE)** to select a source (radio, CD or MD).

2 Press **(SHIFT)**, then press **(3) (SET UP)** repeatedly until "LPF" appears.

3 Press **(5) (→)** or **(2) (←)** repeatedly to select desired setting.

Set
LPF 120Hz

Each time you press **(5) (→)** or **(2) (←)**, the cut-off frequency in the display changes as follows:

LPF off ↔ LPF 80 Hz ↔ LPF 120 Hz

4 Press **(SHIFT)**.
When the frequency setting is complete, the display goes back to the normal playback mode.

With Optional Equipment

CD/MD Unit

You can control up to 7 CD and MD units with this unit.

If you connect an optional CD unit with the CD TEXT function, the CD TEXT information will appear in the display when you play back a CD TEXT disc.

You can label CD and CD TEXT discs with a personalized name using the disc memo function, refer to "Labeling a CD" (page 23). However, if you use personalized labels, they will always take priority over the original CD TEXT information when such information is displayed.

Tip

If the name of the MD or CD TEXT disc is too long, you can scroll it across the display by pressing (SHIFT), then (2) (←).

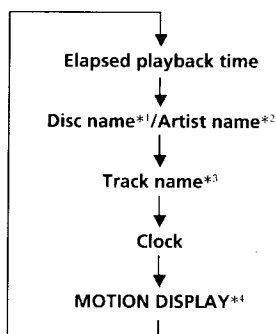
Playing a CD or MD

- 1 Press (SOURCE) repeatedly to select the CD or MD.
- 2 Press (MODE) until the desired unit appears.
CD/MD playback starts.

When a CD/MD unit is connected, all the tracks play from the beginning.

Changing the displayed item

Each time you press (DSPL) during CD, CD TEXT or MD playback, the item changes as follows:



If you have not labeled the disc or there is no disc name prerecorded on the MD, "NO D.Name" appears in the display.

If you play a CD TEXT disc, the artist name appears in the display after the disc name. (Only for CD TEXT discs with the artist name.)

If the track name of a CD TEXT disc or MD is not prerecorded, "NO T.Name" appears in the display.

All the items above are scrolled in the display one by one in order.

Automatically scrolling a disc name

— Auto Scroll

If the disc name/artist name or track name on a CD TEXT disc or MD exceeds 10 characters and the Auto Scroll function is on, automatically scrolls on the display as follows:

- The disc name appears when the disc has changed (if the disc name is selected).
- The track name appears when the track has changed (if the track name is selected).

If you press (DSPL) to change the display item, the disc or track name of the MD or CD TEXT disc is scrolled automatically whether you set the function on or off.

- 1 During playback, press (SHIFT).
- 2 Press (3) (SET UP) repeatedly until "A.Scrl" appears.
- 3 Press (5) (→) to select "A.Scrl on."
- 4 Press (SHIFT)

To cancel Auto Scroll, select "A.Scrl off" in step 2 above.

Note

For some CD TEXT discs with extremely many characters, the following cases may happen:
— Some of the characters are not displayed.
— Auto Scroll does not work.

EN

Other Functions/CD/MD Unit

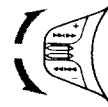
Locating a specific track

— Automatic Music Sensor (AMS)

During playback, push the SEEK/AMS control up or down once for each track you want to skip.

To locate succeeding tracks

To locate preceding tracks



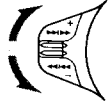
Locating a specific point in a track

— Manual Search

During playback, push the SEEK/AMS control up or down and hold. Release when you have found the desired point.

To search forward

To search backward



EN

Locating a disc by disc number

— Direct Disc Selection

Press the number button that corresponds with the desired disc number.

The desired disc in the current unit begins playback.

Scanning the tracks

— Intro Scan

You can play the first 10 seconds of all the tracks on the current disc.

1 During playback, press **(SHIFT)**, then press **(4)** (PLAY MODE) repeatedly until "Intro" appears.

2 Press **(5)** (→) to select "Intro on."
Intro Scan starts.

3 Press **(SHIFT)**.

To go back to normal playback mode, select "Intro off" in step 2 above.

Playing tracks repeatedly

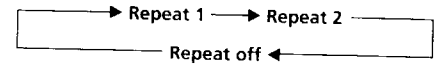
— Repeat Play

You can select:

- Repeat 1 to repeat a track.
- Repeat 2 to repeat a disc.

1 During playback, press **(SHIFT)**.

2 Press **(7)** (REP) repeatedly until the desired setting appears.



Repeat Play starts.

3 Press **(SHIFT)**.

To go back to normal playback mode, select "Repeat off" in step 2 above.

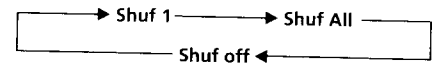
Playing tracks in random order — Shuffle Play

You can select:

- Shuf 1 to play the tracks on the current disc in random order.
- Shuf All to play all the tracks in random order.

1 During playback, press **(SHIFT)**.

2 Press **(8)** (SHUF) repeatedly until the desired setting appears.



Shuffle Play starts.

3 Press **(SHIFT)**.

To go back to normal playback mode, select "Shuf off" in step 2 above.

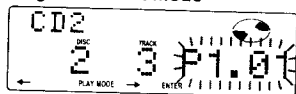
Creating a programme

— Programme Memory (CD/MD unit with the programme memory function)

You can play tracks in the order you want by making your own programme. You can make two programmes: Programme 1 and Programme 2. You can select up to 12 tracks for each programme. You can store the programmes in memory.

- 1 Press **(SHIFT)**, then press **(4)** (PLAY MODE) for two seconds.

Programme edit mode



"P 1" shows Programme 1 is selected.

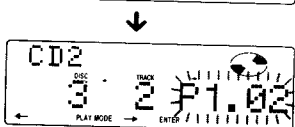
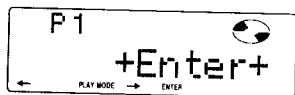
If you have labelled the disc, the bank edit mode appears. Press **(4)** (PLAY MODE) to display "P 1" above.

To select Programme 2, press **(5)** (→) repeatedly until "P 2" appears.

- 2 Select the track you want.

- 1 Press **(SOURCE)** repeatedly to select CD or MD.
- 2 Press **(MODE)** repeatedly to select the unit.
- 3 Press **(SHIFT)**, then press the number button to select the disc.
- 4 Press **(SHIFT)**.
- 5 Push the SEEK/AMS control up or down to select the track.

- 3 Press **(6)** (ENTER) momentarily.



- To continue entering tracks, repeat steps 2 and 3.

- 5 When you finish entering tracks, press **(4)** (PLAY MODE) for two seconds.

- 6 Press **(SHIFT)**.

Notes

- "Wait" appears in the display while the unit is reading the data, or when a disc has not been put into the unit.
- "Mem Full" appears in the display when you try to enter more than 12 tracks into a programme.

Playing the stored programme

Changing the disc order in the unit will not affect programme memory play.

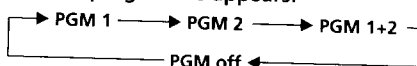
You can select:

- PGM 1 to play Programme 1.
- PGM 2 to play Programme 2.
- PGM 1+2 to play Programmes 1 and 2.

- 1 Press **(SHIFT)**.

- 2 Press **(4)** (PLAY MODE) repeatedly until "PGM" appears.

- 3 Press **(5)** (→) repeatedly until the desired programme appears.



Programme Play starts.

- 4 Press **(SHIFT)**.

To go back to normal playback mode, select "PGM off" in step 3 above.

Notes

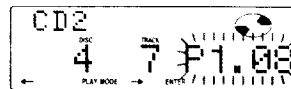
- If you press a number button during programme memory play, programme memory play is interrupted, and playback of the selected disc starts.
- "NO Data" appears in the display if no track is stored in the programme.
- If a track stored into the programme memory is not in the disc magazine, the track will be skipped.
- When the disc magazine contains no tracks stored into the programme memory, or when the programme information has not been loaded yet, "Not ready" appears.

EN

CD/MD Unit

Erasing an entire programme

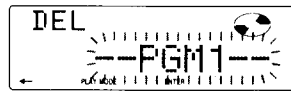
- 1 Press **(SHIFT)**, then press **(4)** (PLAY MODE) for two seconds.



"P 1" shows Programme 1 is selected.

If you have labelled the disc, the bank edit mode appears. Press **(4)** (PLAY MODE) to display "P 1" above.

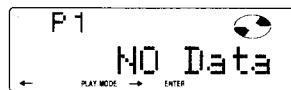
- 2 Press **(2)** (←) repeatedly until "DEL" appears.



To erase Programme 2, press **(5)** (→) repeatedly until "PGM 2" appears.

EN

- 3 Press **(6)** (ENTER) for two seconds.



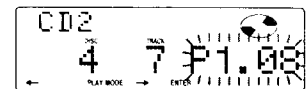
The entire programme is erased.

- 4 When you finish erasing programmes, press **(4)** (PLAY MODE) for two seconds.

- 5 Press **(SHIFT)**.

Adding tracks to a programme

- 1 Press **(SHIFT)**, then press **(4)** (PLAY MODE) for two seconds.



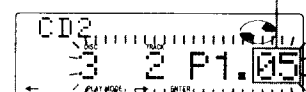
"P 1" shows Programme 1 is selected.

If you have labelled the disc, the bank edit mode appears. Press **(4)** (PLAY MODE) to display "P 1" above.

To select Programme 2, press **(5)** (→) repeatedly until "P 2" appears.

- 2 Press **(2)** (←) or **(5)** (→) to select the track slot number where you want to insert a track.

Track slot number



- 3 Push the SEEK/AMS control up or down to select the track you want to insert.

- 4 Press **(6)** (ENTER) momentarily to enter the track.

The current track in that slot number and the succeeding tracks shift down. To continue inserting tracks, repeat steps 2 through 4.

Note

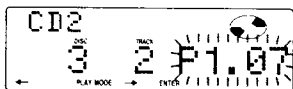
Once all 12 slots have been filled, "Mem Full" appears in the display, and you cannot insert tracks.

- 5 When you finish inserting tracks, press **(4)** (PLAY MODE) for two seconds.

- 6 Press **(SHIFT)**.

Erasing tracks in a programme

- 1 Press **(SHIFT)**, then press **(4)** (PLAY MODE) for two seconds.



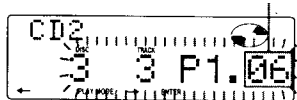
"P 1" shows Programme 1 is selected.

If you have labelled the disc, the bank edit mode appears. Press **(4)** (PLAY MODE) to display "P 1" above.

To select Programme 2, press **(5)** (→) repeatedly until "P 2" appears.

- 2 Press **(2)** (←) or **(5)** (→) to select the track you want to erase.

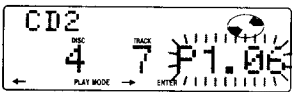
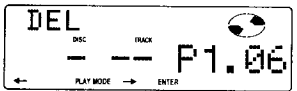
Track slot number



The track currently registered in slot 6 of Programme 1.

- 3 Press **(6)** (ENTER) for two seconds.

When you erase a track from a slot number, the succeeding tracks shift up to fill the gap.



- 4 To continue erasing tracks, repeat steps 2 and 3.

- 5 When you finish erasing tracks, press **(4)** (PLAY MODE) for two seconds.

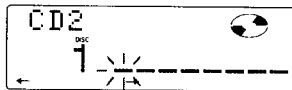
- 5 Press **(SHIFT)**.

Labeling a CD

— Disc Memo (CD unit with the custom file function)

You can label each disc with a personalized name. You can enter up to eight characters for a disc. If you label a CD, you can locate the disc by name (page 25) and select the specific tracks for playback (page 25).

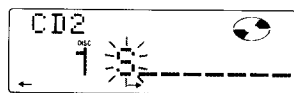
- 1 Play the CD and press **(LIST)** for two seconds.



- 2 Enter the characters.

- 1 Rotate the dial clockwise to select the desired characters.

(A → B → C → ... Z → 0 → 1 → 2 → ... 9 → + → - → * → / → \ → > → < → . → _)

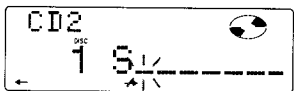


If you rotate the dial counterclockwise, the characters appear in the reverse order.

If you want to put a blank space between characters, select "_" (under-bar).

- 2 Press **(5)** (→) after locating the desired character.

The flashing cursor moves to the next space.



If you press **(2)** (←), the flashing cursor moves to the left.

- 3 Repeat steps 1 and 2 to enter the entire name.

- 3 To return to normal CD playback mode, press **(LIST)** for two seconds.

Tip

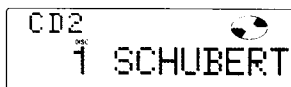
To erase/correct a name enter "_" (under-bar) for each character.

EN

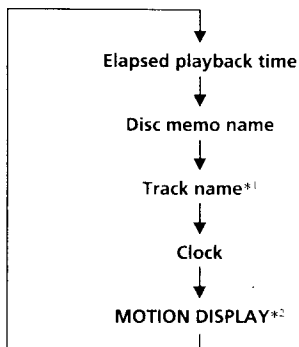
CD/MD Unit

Displaying the disc memo name

Press **(DSPL)** during CD or CD TEXT disc playback.



Each time you press **(DSPL)** during CD or CD TEXT disc playback, the item changes as follows:



*1 If you connect an optional CD unit with the CD TEXT function, the CD TEXT information will appear in the display when you playback a CD TEXT disc.

*2 All the items above are scrolled in the display one by one in order.

Erasing the disc memo

- 1 Press **(SOURCE)** repeatedly to select CD.
- 2 Press **(MODE)** repeatedly to select the CD unit.
- 3 Press **(LIST)** for two seconds.
- 4 Press **(DSPL)** for two seconds.
- 5 Rotate the dial to select the name you want to erase.
- 6 Press **(6) (ENTER)** for two seconds.
The name is erased.
Repeat steps 5 and 6 if you want to erase other names.
- 7 Press **(LIST)** for two seconds.
The unit returns to normal CD playback mode.

Note

When the personalized label is erased, the original CD TEXT information will appear in the display.

Locating a disc by name

— List-up (CD unit with the custom file function or MD unit)

You can use this function for discs that have been assigned a custom name. For more information on disc names, refer to "Labeling a CD" (page 23).

1 Press (LIST) momentarily.

The name assigned to the current disc appears in the display.



When you assign a disc memo label to a CD TEXT disc, it takes priority over the original CD TEXT information.

2 Press (LIST) repeatedly until you find the desired disc.

3 Press (6) (ENTER) to play back the disc.

Notes

- After a disc name has been displayed for five seconds, the display goes back to normal playback mode. To turn off the display, press (DSPL).
- The track names are not displayed during MD or CD TEXT disc playback.
- If there are no discs in the magazine, "NO Disc" appears in the display.
- If a disc has not been assigned a custom file, "*****" appears in the display.
- If the disc information has not been read by the unit, "?" appears in the display. To load the disc, first press the number button, then choose the disc that has not been loaded.
- The information appears only in upper case. There are also some letters which cannot be displayed (during MD or CD TEXT disc playback).

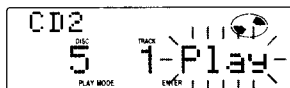
Selecting specific tracks for playback

— Bank (CD unit with the custom file function)

If you label the disc, you can set the unit to skip tracks and play only the tracks you want.

1 Start playing the disc and press (SHIFT). Then press (4) (PLAY MODE) for two seconds.

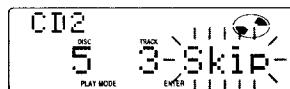
Bank edit mode.



Note

If you have not labeled the disc, the bank edit mode does not appear and the programme edit mode appears. To go back to normal playback mode, press (SHIFT).

2 Push the SEEK/AMS control up or down to select the track number you want to skip and press (6) (ENTER).



The indication changes from "Play" to "Skip." If you want to return to "Play," press (6) (ENTER) again.

3 Repeat step 2 to set the "Play" or "Skip" mode on all the tracks.

4 Press (4) (PLAY MODE) for two seconds.

The unit returns to normal CD playback mode.

5 Press (SHIFT).

Notes

- You can set the "Play" and "Skip" mode on up to 24 tracks.
- You cannot set the "Skip" mode on all the tracks.

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CD/MD Unit

Playing the specific tracks only

You can select:

- Bank on to play the tracks with the "Play" setting.
- Bank inv (Inverse) to play the tracks with the "Skip" setting.

1 During playback, press **(SHIFT)**, then press **(4)** (PLAY MODE) repeatedly until "Bank" appears.

2 Press **(5)** (→) to repeatedly until the desired setting appears.

→ Bank on → Bank inv → Bank off →



Playback starts from the track following the current one.

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3 Press **(SHIFT)**.

To go back to normal playing mode, select "Bank off" in step 2 above.

Additional Information

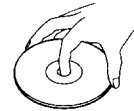
Precautions

- If your car was parked in direct sunlight resulting in a considerable rise in temperature inside the car, allow the unit to cool off before operating it.
- If no power is being supplied to the unit, check the connections first. If everything is in order, check the fuse.
- If no sound comes from the speakers of two-speaker systems, set the fader control to the centre position.
- If your car is equipped with a power aerial, it will extend automatically while the unit is operating.

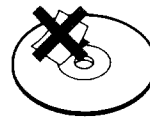
If you have any questions or problems concerning your unit that are not covered in this manual, please consult your nearest Sony dealer.

Notes on handling CDs

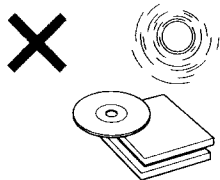
A dirty or defective disc may cause sound dropouts while playing. To enjoy optimum sound, handle the disc as follows. Handle the disc by its edge. To keep the disc clean, do not touch the surface.



Do not stick paper or tape on the labelled surface.



Do not expose the discs to direct sunlight or heat sources such as hot air-ducts, or leave them in a car parked in direct sunlight where there can be a considerable rise in the temperature inside the car.



Before playing, clean the discs with an optional cleaning cloth. Wipe each disc from the centre out.

Do not use solvents such as benzene, thinner, commercially available cleaners or antistatic spray intended for analog discs.



Note on moisture condensation

On a rainy day or in a very damp area, moisture may condense on the lenses inside the CD player. Should this occur, the unit will not operate properly. In this case, remove the disc and wait for about an hour until the moisture evaporates.

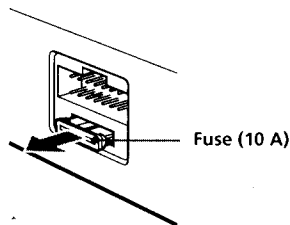
When you play 8 cm (3 in.) CDs

Use the optional Sony compact disc single adapter (CSA-8) to protect the CD player from being damaged.

Maintenance

Fuse replacement

When replacing the fuse, be sure to use one that matches the amperage described on the fuse. If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest Sony dealer.

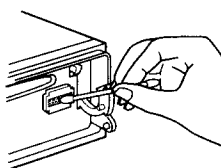


Warning

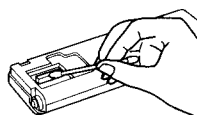
Never use a fuse with an amperage rating exceeding the one supplied with the unit as this could damage the unit.

Cleaning the connectors

The unit may not function properly if the connectors between the unit and the front panel are not clean. To prevent this, open the front panel by pressing **OPEN**, then detach it and clean the connectors with a cotton swab dipped in alcohol. Do not apply too much force. Otherwise, the connectors may be damaged.



Main unit



Back of the front panel

Notes

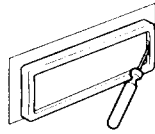
- For safety, before cleaning the connectors, turn off the engine and remove the key from the ignition switch.
- Never touch the connectors directly with your fingers or any metal device.

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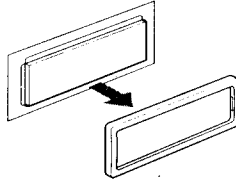
CD/MD Unit/Additional Information

Dismounting the unit

- 1 Press the clip inside the front cover with a thin screwdriver, and lever the front cover free.

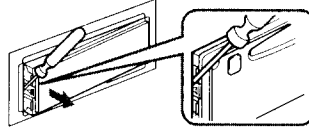


- 2 Repeat step 1 on the left side.
The front cover is removed.

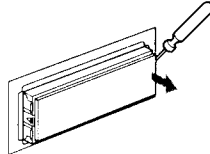


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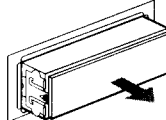
- 3 Use a thin screwdriver to push in the clip on the left side of the unit, then pull out the left side of the unit until the catch clears the mounting.



- 4 Repeat step 3 on the right side.

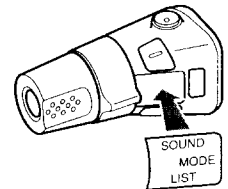
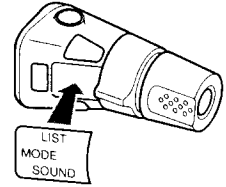


- 5 Slide the unit out of the mounting.



Attaching the label to the rotary commander

You can control this unit with the optional rotary commander (RM-X4S). Several labels are supplied with the rotary commander. Attach the label that matches the functions of this unit and the mounting position of the rotary commander. After you mount the rotary commander, attach the label in the illustration below.



Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

17 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 1 % total harmonic distortion.

Other specifications

CD player section

System	Compact disc digital audio system
Signal-to-noise ratio	99 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit
Laser Diode Properties	
Material	GaAlAs
Wavelength	780 nm
Emission Duration	Continuous
Laser output power	Less than 44.6 μW*

* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

Tuner section

FM

Tuning range	87.5 – 107.9 MHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz 50 dB at 200 kHz
Signal-to-noise ratio	62 dB (stereo), 65 dB (mono)
Harmonic distortion at 1 kHz	0.9 % (stereo), 0.5 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	2 dB

AM

Tuning range	530 – 1,710 kHz
Antenna terminal	External antenna connector
Intermediate frequency	10.71 MHz/450 kHz
Sensitivity	30 μV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	45 W × 4 (at 4 ohms)

General

Outputs	Line outputs (3) Power antenna relay control lead Power amplifier control lead Telephone ATT control lead Illumination control lead
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 × 50 × 182 mm (7 1/8 × 2 × 7 1/4 in.) (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 163 mm (7 1/4 × 2 1/8 × 6 1/2 in.) (w/h/d)
Mass	Approx. 1.4 kg (3 lb. 1 oz.)
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Rotary commander RM-X4S Wireless remote RM-X47 BUS cable (supplied with an RCA pin cord) RC-61 (1 m), RC-62 (2 m) RCA pin cord RC-63 (1 m) Cleaning cloth XP-CD1 Compact disc single adapter CSA-8
Optional accessories	CD changer CDX-805 (10 discs), CDX-715 (10 discs), CDX-T65 (6 discs), CDX-T62 (6 discs) MD changer MDX-61, MDX-62 Source selector XA-C30
Optional equipment	

Design and specifications are subject to change without notice.

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Additional Information

Troubleshooting guide

The following checklist will help you remedy the problems you may encounter with your unit. Before going through the checklist below, check the connection and operating procedures.

General

Problem	Cause/Solution
No sound.	• Cancel the ATT function. • Set the fader control to the centre position for two-speaker systems. • Rotate the dial in a clockwise direction to adjust the volume.
The contents of the memory have been erased.	• The power cord or battery has been disconnected. • The reset button has been pressed. → Store again into the memory.
Indications do not appear in the display.	Remove the front panel and clean the connectors. See "Cleaning the connectors" (page 27) for details.

CD/MD playback

Problem	Cause/Solution
A disc cannot be loaded.	• Another CD is already loaded. • The CD is forcibly inserted upside down or in the wrong way (MD).
Playback does not begin.	Defective MD or dusty CD.
A disc is automatically ejected.	The ambient temperature exceeds 50°C (122°F).
The operation buttons do not function.	Press the reset button.
The sound skips due to vibration.	• The unit is installed at an angle of more than 60°. • The unit is not installed in a sturdy part of the car.

Radio reception

Problem	Cause/Solution
Preset tuning is not possible.	• Memorise the correct frequency. • The broadcast signal is too weak.
Automatic tuning is not possible.	The broadcast signal is too weak. → Use manual tuning.
The "ST" indication flashes.	• Tune in the frequency accurately. • The broadcast signal is too weak. → Set to the MONO mode (page 14).

Error displays

The following indications will flash for about five seconds, and an alarm sound will be heard.

Display	Cause	Solution
NO Mag	The disc magazine is not inserted in the CD/MD unit.	Insert the disc magazine in the CD/MD unit.
NO Disc	No disc is inserted in the CD/MD unit.	Insert discs in the CD/MD unit.
NG Discs	A CD/MD cannot play because of some problem.	Insert another CD/MD.
Error ^{*1}	A CD is dirty or inserted upside down. ^{*2}	Clean or insert the CD correctly.
	An MD does not play because of some problem. ^{*2}	Insert another MD.
Blank ^{*1}	No tracks have been recorded on an MD. ^{*2}	Play an MD with tracks recorded on it.
PushReset	The CD/MD unit cannot be operated because of some problem.	Press the reset button of the unit.
Not Ready	The lid of the MD unit is open or MDs are not inserted properly.	Close the lid or insert the MDs properly.
HighTemp	The ambient temperature is more than 50°C (122°F).	Wait until the temperature goes down below 50°C (122°F).

^{*1} When an error occurs during playback of an MD or CD, the disc number of the MD or CD does not appear in the display.

^{*2} The disc number of the disc causing the error appears in the display.

If the above-mentioned solutions do not help improve the situation, consult your nearest Sony dealer.

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Additional Information